



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

MoS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/235,686 01/22/99 LIU

A AC06105

IM22/0807

LAINIE E. PARKER  
AKZO NOBEL INC.  
INTELLECTUAL PROPERTY DEPARTMENT  
7 LIVINGSTONE AVENUE  
DOBBS FERRY NY 10522-3408

EXAMINER

JACKSON, M

ART UNIT

PAPER NUMBER

1773

DATE MAILED:

08/07/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**

Application No.

09/235,686

Applicant(s)

LIU ET AL.

Examiner

Monique R Jackson

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☒ Claim(s) 3~~and~~ 15 is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) \_\_\_\_.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

**Attachment(s)**

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-6.
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

### **DETAILED ACTION**

1. The information disclosure statement filed 4/21/99 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Considering no copies were received for the references listed on the IDS filed 4/21/99, the Examiner requests the Applicant to submit copies for the "Other Documents" for they appear to contain information pertinent to the invention.

#### ***Specification***

2. The disclosure is objected to because of the following informalities:

Page 4, line 1 – "resulting the impregnated paper" is unclear.

Page 4, line 5 – "mircospheres" is misspelled.

Page 7, line 2 – "67 wt.% on solids" is unclear.

Page 7, line 12 – "on" should be "in".

Page 7, lines 15-16 – "films ... was" – improper noun/verb agreement.

Appropriate correction is required.

#### ***Claim Objections***

3. Claim 3 is objected to because of the following informalities: "mircospheres" is misspelled. Appropriate correction is required.

4. Claim 15 is objected to because of the following informalities: in line 1, "claim10" needs a space between "claim" and "10". Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 33-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 33 recites the limitation “film of claim 9 laminated to a **substrate**” in lines 1-2. However, the “film of claim 9” comprises “a **substrate** impregnated with a thermosetting resin” as recited in line 2 of claim 1. The Applicant provides no clear distinction between the substrate stated in claim 1 and the substrate stated in claim 33. Therefore, where claims 34 and 35 state “**said substrate**” it is unclear as to which substrate the Applicant is referring. For examination purposes, the Examiner will assume that the substrate materials cited in claims 34 and 35 refer to a base material that the impregnated substrate of claim 10 is laminated to and not the substrate that is impregnated in claim 1.

7. Claims 36-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 36 recites the limitation “film of claim 10 laminated to a **substrate**” in lines 1-2. However, the “film of claim 10” comprises “a **substrate** impregnated with a thermosetting resin” as recited in line 2 of claim 1. The Applicant provides no clear distinction between the substrate stated in claim 1 and the substrate stated in claim 36. Therefore, where claims 37 and 38 state “**said substrate**” it is unclear as to which substrate the Applicant is referring. For examination purposes, the Examiner will assume that the substrate materials cited

in claims 37 and 38 refer to a base material that the impregnated substrate of claim 10 is laminated to and not the substrate impregnated in claim 1.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Ungar et al. (USPN 4,713,138.) Ungar et al. teach an abrasion-resistant laminate comprising a paper substrate impregnated with an uncured melamine/formaldehyde thermosetting resin containing a low profile additive and a process of making the abrasion-resistant laminate (Abstract; Column 3, lines 8-23.) The low profile additive may comprise ceramic microspheres and polyethylene powder and is present in an amount sufficient to provide an abrasion resistant layer without interfering with visibility (Column 3, lines 48-60; Column 9, line 43; and Examples.) The laminates were subjected to the NEMA LD3-1980 abrasion-resistance test and the sliding can test with superior abrasion-resistance results in both tests (Column 10, lines 23-36; and Column 12, lines 60-68.) The laminates were not subjected to the Teledyne Taber Scratch Tester, however, one having ordinary skill in the art could easily perform this test with no undue experimentation with anticipated results also greater than 2.5N for the composition of the thermosetting resin is the same as the instantly claimed invention. In terms of the method, Ungar et al. teach that paper substrate may be impregnated from the top surface and dried at an elevated temperature to produce a partially cured laminate to be used as the top sheet in the production of

high or low pressure decorative laminates (Column 3, lines 8-23.) Further, to ensure complete absorption of the saturating resin into the substrate, the impregnated substrate may be further impregnated with additional resin after the first impregnation (Column 3, lines 40-46; and Column 4, lines 61-67.) Ungar et al. also teach that the scratch-resistant, impregnated paper is assembled as a face sheet with a plurality of phenolic resin impregnated kraft paper sheets as a backing sheet and subjected to a temperature of 230-340°F and a pressure of 800-1600 psi to effect consolidation of the assembly (Claim 13.) The back of the laminated assembly may be sanded to permit lamination to particleboard, plywood or other substrates (Column 1, lines 22-32; incorporation by reference - USPN 4,255,480, Column 2, lines 3-5.)

10. Claims 1-2, 4-9, 20-22, 24-29, 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Ungar et al. (USPN 4,741,946.) Ungar et al. teach an abrasion-resistant laminate comprising a paper substrate impregnated with an uncured melamine/formaldehyde thermosetting resin containing a low profile additive and a process of making the abrasion-resistant laminate (Abstract; Column 1, lines 27-31.) The low profile additive may comprise polyethylene powder and is present in an amount sufficient to provide an abrasion resistant layer without interfering with visibility (Column 6, lines 15-68; and Examples.) The laminates were subjected to the NEMA LD3-1980 abrasion-resistance test and the sliding can test with excellent abrasion-resistance results in both tests (Column 2, lines 24-52; and Examples.) The laminates were not subjected to the Teledyne Taber Scratch Tester, however, one having ordinary skill in the art could easily perform this test with no undue experimentation with anticipated results also greater than 2.5N for the composition of the thermosetting resin is the same as the instantly claimed invention. In terms of the method, Ungar et al. teach that paper substrate may be

Art Unit: 1773

impregnated with the uncured resin and dried at an elevated temperature to produce a partially cured laminate to be used as the top ply in the production of high pressure decorative laminates (Column 1, lines 10-58; and Column 7, lines 9-58.) In making the high pressure laminates, Ungar et al. teach that the scratch-resistant, impregnated paper is assembled as the top ply with a plurality of phenolic resin impregnated kraft paper sheets as core sheets and subjected to a temperature of 230-340°F and a pressure of 800-1600 psi to effect consolidation of the assembly (Column 1, lines 21-66; and Examples.) The back of the laminated assembly may be sanded to permit lamination to particleboard, plywood or other substrates (Column 1, line 67-Column 2, lines 5.)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-6078 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



mrj  
August 2, 2000



Paul Thibodeau  
Supervisory Patent Examiner  
Technology Center 1700